Index

IEE Proceedings
Communications

Vol. 145, 1998

Author Index

A

Ali, A.A. p414
Ambroze, A. p53
Andreadis, A. p259
Aweya, J. p227

B

Bajj, N.F. p191
Band, I.W. p186
Bar-David, I. p47
Benelli, G. p259
Braun, R.M. p41
Brown, J. p168

C

Chan, H.C.B. p159, p347
Chan, M.C. p19
Chang, J.-F. p249
Chang, P.L. p1
Chen, J. p80
Chen, J.-C. p145
Chen, S. p316
Chen, X.H. p371
Cheng, T.-H. p80
Cheng, Y.-C. p60
Cheng, Y.-J. p241
Cheung, K.W. p445
Chng, E.S. p316
Choi, B.D. p25, p152, p331, p395
Choi, D.I. p331, p395
Choi, J.S. p141
Choi, K.B. p152
Choi, S.H. p25
Chou, L.-D. p33
Chung, B.-H. p283
Coulson, A.J. p197
Craveirinha, J.M.F. p73
Cruickshank, D.G.M. p186
Cuthbert, J.A. p41

D

Del Re, E. p277
Deng, R.H. p91
Diab, M. p126
Doumi, T.I. p378

E

Esteves, N. p419
Evans, B.G. p363

F

Fairhurst, G. p180
Fan, Z. p133
Fantacci, R. p277
Farrell, P.G. p289
Feng, G. p389
Fragiacomo, S. p337

G

Gardiner, J.G. p378
Giannoccaro, O. p277
Gibson, G.J. p316
Gomes, T.M.S. p73
Goncalves, V. p419
Gott, G.F. p168
Green, D.H. p117, p265
Gunawan, E. p355
Gusmao Correia, A. p419

H

Han, D.H. p152
Hong, H. p426

I

Izzo, L. p272

J

Jang, J.S. p152

K

Kayran, A.H. p109
Khandani, A.K. p213
Kim, K.S. p283
Kot, A.C. p99, p431
Krishnamoorthy, R. p47
Kwon, T. p304
Kwong, W.C. p297

L

Lam, S.P. p234
Lang, T. p371
Laycock, P.J. p168
Lee, H. p8
Lee, J. p363
Lee, S.W. p117, p265
Lee, T.-H. p241
Lee, Y. p331
Leung, S.H. p406
Leung, V.C.M. p159, p347
Leung, Y.-W. p87
Li, K.H. p99, p431
Lin, C.R. p342
Lin, Y.-S. p145
Liu, P.C.K. p19
Lu, E.-H. p60
Lu, P.-C. p60

M

Makhamreh, I.I. p15
Mann, S. p297
Mars, P. p133
Matrakidis, C. p337
Mulgrew, B. p316, p323
Murch, R.D. p445

N

Nemoto, Y. p8
Nikandrou, N. p191

O

Oksman, J. p371
Olasz, E.B. p105
O'Reilly, J. p337
Orozco-Barbosa, L. p227
Ozden, M.T. p109

P

Panayirci, E. p109
Pang, S.L. p180
Pantjiaros, C.A. p168
Pao, D.C.W. p234
Park, C.G. p25
Park, S.I. p283
Patra, S.K. p323
Peng, X.-H. p289
Popplewell, A. p337

R

Rajatheva, R.M.A.P. p309
Ruiz, G. p378

S

Salous, S. p191
Scott, K. p105
Sendyk, A. p105
Sennati, D. p259
Sheen, W.H. p437
Shen, W.-Z. p241
Shin, B.-C. p152
Shung, C.B. p145
Shwedyk, E. p309, p426
Sim, M.L. p355
Soh, C.B. p355
Song, I. p283
Song, J. p304
Soong, B.H. p355
Sung, D.K. p25, p331, p395

T

Tafazolli, R. p363
Tanda, M. p272
Teh, K.C. p99, p431
Thesling, W.H. p218
Tomlinson, M. p53
Tseng, C.-C. p437
Tung, T.-Y. p249

U

Un, C.K. p141

V

Vanderaar, M.J. p218
Varshney, P.K. p1
Vaughan, R.G. p197

W

Wade, G. p53
Wan, P.S. p180
Weng, J.F. p406
Wey, L.-Y. p451
Williamson, A.G. p197
Wolfe, L. p175
Wu, J.-L.C. p33, p451
Wylie, J.A. p168

X

Xin, D. p402
Xiong, F. p218

Y

Yang, B.-T. p87
Yen, W.F. p65
Yum, T.-S.P. p389

Z

Zhang, J.-G. p297
Zhou, H. p91
Zongzhou Fu p203

ADAPTIVE CONTROL

Neurocontroller for buffer overload control in a packet switch p227

CLOSED LOOP SYSTEMS

Characteristics of closed loop power control algorithms for a cellular DS/CDMA system p355

CODES AND DECODING

(M−1) and (M−2) selfsynchronising M-ary codes generated with coding efficiency p65
Analysis and performance comparison of the trellis coded and convolutional coded DS/SSMA systems in impulsive noise environment p283
Code acquisition with diversity combining for FFH/MFSK spread spectrum systems p437
Coding for coherent optical CDMA networks p117
Construction of 2^n extended prime codes with cross-correlation constraint of one p297
Convolutional coding for bandlimited channels p309
Fast decoder for triple-error-correcting primitive binary BCH codes with odd m p60
Improving the capacity of CDMA systems using convolutional coding and interference cancellation p186
Incomplete locator polynomials and redundant iterations reduction in the Welch-Berlekamp algorithm p402
Iterative MAP decoding for serial concatenated convolutional codes p53
MQAM modulation and RS codes for SS-CDMA communication over Rician fading channels p414
Multiple chip-rate DS/CDMA system and its spreading code dependent performance analysis p371
Novel accelerated simulation techniques for low bit error rate communication systems p337
Performance analysis of optical orthogonal codes in CDMA LANs p265
Practical 8-PSK block-coded modulation with convolutional codes and soft decision block codes for packet networks p218
Selection of multi-h modulation sets using a stochastic search algorithm p41
Smart codec: an adaptive packet data link p180
Systolic decoder for burst error-correcting codes p126
Threshold decoding and a new class of threshold decodable codes p289

COMMUNICATION SYSTEM THEORY

Adaptive Volterra channel equalisation with lattice orthogonalisation p109
Algorithm for sequential generation of states in failure-prone communication network p73
Analysis and performance comparison of the trellis coded and convolutional coded DS/SSMA systems in impulsive noise environment p283
Analysis of a leaky bucket control scheme in the signalling system no.7 network p25
Authenticated key exchange protocols resistant to password guessing attacks p304
Capture model for mobile radio slotted ALOHA systems p91
Cell-access control for multiple cell-loss classes in shared ATM output buffer p8
Channel assignment of cellular mobile systems with nonuniform cells p451
Characteristics of closed loop power control algorithms for a cellular DS/CDMA system p355
Coding for coherent optical CDMA networks p117
Construction of 2^n extended prime codes with cross-correlation constraint of one p297
Convolutional coding for bandlimited channels p309
Delay performance of an input queueing packet switch with two priority classes p141
Diversity reception of fading signals in spherically invariant noise p272
Evaluation of reservation-arbitrated access schemes for statistical multiplexing of variable-bit-rate video traffic over dual-bus metropolitan area networks p159
Fast and accurate estimation of ATM quality-of-service parameters with applications to call admission control p133
Improving the capacity of CDMA systems using convolutional coding and interference cancellation p186
Integration of optimal routing and flow control in ATM networks p1
Look-ahead reservation-based scheduling for input-output buffered ATM switch p234
Lower bound for multimedia multicast routing p87
MQAM modulation and RS codes for SS-CDMA communication over Rician fading channels p414
Multimedia transport in multihop wireless networks p342
Multiparty videoconferencing on multi-drop VP-based SONET/ATM rings: performance analysis p389
Multiple chip-rate DS/CDMA system and its spreading code dependent performance analysis p371
Neurocontroller for buffer overload control in a packet switch p227
New channel access protocol for a wide area DGPS deformation monitoring network p203
Performance analysis of optical orthogonal codes in CDMA LANs p265
Performance analysis of priority leaky bucket scheme with queue-length-threshold scheduling policy p395
Performance of fast bandwidth reservation with multipath routing p80
Performance of hybrid OCA-FD/CDMA for cellular mobile communications p363
Practical RAKE receiver architecture for the downlink communications in a DS-CDMA mobile system p277
Priority queue with two-state Markov-modulated arrivals p152
Priority queueing system with fixed-length packet-train arrivals p331
Reservation arbitrated access for efficient service integration over dual-bus metropolitan area networks p347
Throughput analysis of input-buffered ATM switch p15

COMPUTATIONAL COMPLEXITY

Adaptive MLSE of QAM signals over frequency nonselective Rayleigh fading channels p426
Fast decoder for triple-error-correcting primitive binary BCH codes with odd m p60
Fuzzy implementation of a Bayesian equaliser in the presence of intersymbol and co-channel interference p323
Lower bound for multimedia multicast routing p87
Practical 8-PSK block-coded modulation with convolutional codes and soft decision block codes for packet networks p218

COMPUTER APPLICATIONS

Bandwidth allocation of virtual paths using neural-network-based genetic algorithms p33
Neurocontroller for buffer overload control in a packet switch p227

COMPUTER COMMUNICATIONS

Coding for coherent optical CDMA networks p117
Evaluation of reservation-arbitrated access schemes for statistical multiplexing of variable-bit-rate video traffic over dual-bus metropolitan area networks p159
Integration of optimal routing and flow control in ATM networks p1
Neurocontroller for buffer overload control in a packet switch p227
Performance analysis of optical orthogonal codes in CDMA LANs p265
Reservation arbitrated access for efficient service integration over dual-bus metropolitan area networks p347

DATA COMMUNICATION

Authenticated key exchange protocols resistant to password guessing attacks p304
Coding for coherent optical CDMA networks p117
Evaluation of reservation-arbitrated access schemes for statistical multiplexing of variable-bit-rate video traffic over dual-bus metropolitan area networks p159
Integration of optimal routing and flow control in ATM networks p1
Neurocontroller for buffer overload control in a packet switch p227
Performance analysis of optical orthogonal codes in CDMA LANs p265
Reservation arbitrated access for efficient service integration over dual-bus metropolitan area networks p347

DIGITAL ELECTRONICS

Digital techniques for mobile radio chirp sounders p191
Fast decoder for triple-error-correcting primitive binary BCH codes with odd m p60
Systolic decoder for burst error-correcting codes p126

ELECTROMAGNETIC THEORY

Capture model for mobile radio slotted ALOHA systems p91
Code acquisition with diversity combining for FFH/MFSK spread spectrum systems p437
FFT-based self-normalising receiver for FFH spread spectrum systems p99
Fuzzy implementation of a Bayesian equaliser in the presence of intersymbol and co-channel interference p323
Improving the capacity of CDMA systems using convolutional coding and interference cancellation p186
MQAM modulation and RS codes for SS-CDMA communication over Rician fading channels p414
Optimising indoor base-station locations in coverage- and interference-limited indoor environments p445
Performance analysis of an FFH/BFSK self-normalising receiver under multitone jamming p431

ELECTRIC VARIABLES CONTROL

Characteristics of closed loop power control algorithms for a cellular DS/CDMA system p355

ERRORS AND ERROR ANALYSIS

Capture model for mobile radio slotted ALOHA systems p91
FFT-based self-normalising receiver for FFH spread spectrum systems p99
Novel accelerated simulation techniques for low bit error rate communication systems p337
Selection of multi-h modulation sets using a stochastic search algorithm p41

EXPERT SYSTEMS

Bandwidth allocation of virtual paths using neural-network-based genetic algorithms p33

FEEDBACK

Neurocontroller for buffer overload control in a packet switch p227

INFORMATION THEORY

Finding sufficient inputs to calculate communications channel capacity p175
Shaping the boundary of a multi-dimensional signal constellation with a non-flat power spectrum p213

INTERFERENCE SUPPRESSION

Capture model for mobile radio slotted ALOHA systems p91
Code acquisition with diversity combining for FFH/MFSK spread spectrum systems p437
FFT-based self-normalising receiver for FFH spread spectrum systems p99
Fuzzy implementation of a Bayesian equaliser in the presence of intersymbol and co-channel interference p323
Improving the capacity of CDMA systems using convolutional coding and interference cancellation p186
MQAM modulation and RS codes for SS-CDMA communication over Rician fading channels p414
Optimising indoor base-station locations in coverage- and interference-limited indoor environments p445
Performance analysis of an FFH/BFSK self-normalising receiver under multitone jamming p431

ISDN

Analysis of a leaky bucket control scheme in the signalling system no.7 network p25
Reservation arbitrated access for efficient service integration over dual-bus metropolitan area networks p347

MATHEMATICAL TECHNIQUES

Bandwidth allocation of virtual paths using neural-network-based genetic algorithms p33
Look-ahead reservation-based scheduling for input-output buffered ATM switch p234
Lower bound for multimedia multicast routing p87
Neurocontroller for buffer overload control in a packet switch p227
Optimising indoor base-station locations in coverage- and interference-limited indoor environments p445
Selection of multi-h modulation sets using a stochastic search algorithm p41

MEASUREMENT OF SPECIFIC VARIABLES

Extended UK models for high frequency spectral occupancy p168

MODULATION

Adaptive MLSE of QAM signals over frequency nonselective Rayleigh fading channels p426
Analysis of DPSK nonlinear combiner over fading channels with impulse noise p406
Diversity combining with MLSE equalisation p105
FFT-based self-normalising receiver for FFH spread spectrum systems p99
Performance analysis of an FFH/BFSK self-normalising receiver under multitone jamming p431
Transmission modelling of ENCAP-OQPSK radio links p419

MULTIMEDIA

Lower bound for multimedia multicast routing p87
Multimedia transport in multihop wireless networks p342
Reservation arbitrated access for efficient service integration over dual-bus metropolitan area networks p347

NEURAL NETS

Bandwidth allocation of virtual paths using neural-network-based genetic algorithms p33
Neurocontroller for buffer overload control in a packet switch p227

NUMERICAL ANALYSIS

Adaptive Volterra channel equalisation with lattice orthogonalisation p109
FFT-based self-normalising receiver for FFH spread spectrum systems p99
Incomplete locator polynomials and redundant iterations reduction in the Welch-Berlekamp algorithm p402
Iterative MAP decoding for serial concatenated convolutional codes p53
Reservation arbitrated access for efficient service integration over dual-bus metropolitan area networks p347
Space translation properties and the minimum-BER linear-combiner DFE p316
Teletraffic analysis of an integrated satellite/terrestrial mobile radio system based on nongeostationary satellites p378

OPTICAL IMAGE PROCESSING

Coding for coherent optical CDMA networks p117

OPTICAL LINKS AND EQUIPMENT

Coding for coherent optical CDMA networks p117
Performance analysis of optical orthogonal codes in CDMA LANs p265

OPTIMISATION

Fuzzy implementation of a Bayesian equaliser in the presence of intersymbol and co-channel interference p323
Look-ahead reservation-based scheduling for input-output buffered ATM switch p234
Lower bound for multimedia multicast routing p87
Neurocontroller for buffer overload control in a packet switch p227
Optimising indoor base-station locations in coverage- and interference-limited indoor environments p445

PARALLEL PROCESSING

Systolic decoder for burst error-correcting codes p126

PARAMETER ESTIMATION

Fast and accurate estimation of ATM quality-of-service parameters with applications to call admission control p133
Practical RAKE receiver architecture for the downlink communications in a DS-CDMA mobile system p277

PERFORMANCE EVALUATION

Evaluation of reservation-arbitrated access schemes for statistical multiplexing of variable-bit-rate video traffic over dual-bus metropolitan area networks p159
Reservation arbitrated access for efficient service integration over dual-bus metropolitan area networks p347

PROBABILITY AND STATISTICS

Algorithm for sequential generation of states in failure-prone communication network p73
Analysis and performance comparison of the trellis coded and convolutional coded DS/SSMA systems in impulsive noise environment p283
Analysis of a leaky bucket control scheme in the signalling system no.7 network p25
Analysis of DPSK nonlinear combiner over fading channels with impulse noise p406
Blocking analysis of time-division multiplexed multicast switch with intermediate channel grouping p19
Capture model for mobile radio slotted ALOHA systems p91
Cell-access control for multiple cell-loss classes in shared ATM output buffer p8
Construction of 2^n extended prime codes with cross-correlation constraint of one p297
Delay spread profiles and receiver performance in a dense multipath environment p47
Diversity reception of fading signals in spherically invariant noise p272
Fast and accurate estimation of ATM quality-of-service parameters with applications to call admission control p133
FFT-based self-normalising receiver for FFH spread spectrum systems p99
Improved fading distribution for mobile radio p197
Iterative MAP decoding for serial concatenated convolutional codes p53
Look-ahead reservation-based scheduling for input-output buffered ATM switch p234
MQAM modulation and RS codes for SS-CDMA communication over Rician fading channels p414
Multiparty videoconferencing on multi-drop VP-based SONET/ATM rings: performance analysis p389
Neurocontroller for buffer overload control in a packet switch p227
Novel accelerated simulation techniques for low bit error rate communication systems p337
Performance analysis of an FFH/BFSK self-normalising receiver under multitone jamming p431
Performance analysis of priority leaky bucket scheme with queue-length-threshold scheduling policy p395
Performance of fast bandwidth reservation with multipath routing p80
Priority queue with two-state Markov-modulated arrivals p152
Priority queueing system with fixed-length packet-train arrivals p331
Selection of multi-h modulation sets using a stochastic search algorithm p41
Space translation properties and the minimum-BER linear-combiner DFE p316
Teletraffic analysis of an integrated satellite/terrestrial mobile radio system based on nongeostationary satellites p378

PRODUCTION ENGINEERING

Fault diagnosis of a distributed knockout switch p241

RADIO SYSTEMS

Adaptive MLSE of QAM signals over frequency nonselective Rayleigh fading channels p426
Analysis and performance comparison of the trellis coded and convolutional coded DS/SSMA systems in impulsive noise environment p283
Analysis of DPSK nonlinear combiner over fading channels with impulse noise p406
Capture model for mobile radio slotted ALOHA systems p91
Channel assignment of cellular mobile systems with nonuniform cells p451
Characteristics of closed loop power control algorithms for a cellular DS/CDMA system p355
Code acquisition with diversity combining for FFH/MFSK spread spectrum systems p437
Delay spread profiles and receiver performance in a dense multipath environment p47
Digital techniques for mobile radio chirp sounders p191
Diversity combining with MLSE equalisation p105
FFT-based self-normalising receiver for FFH spread spectrum systems p99
Fuzzy implementation of a Bayesian equaliser in the presence of intersymbol and co-channel interference p323
Improved fading distribution for mobile radio p197
Improving the capacity of CDMA systems using convolutional coding and interference cancellation p186
MQAM modulation and RS codes for SS-CDMA communication over Rician fading channels p414
Multimedia transport in multihop wireless networks p342
Multiple chip-rate DS/CDMA system and its spreading code dependent performance analysis p371
New channel access protocol for a wide area DGPS deformation monitoring network p203
New system for the interconnection of ATM networks via wireless links p259
Optimising indoor base-station locations in coverage- and interference-limited indoor environments p445
Performance analysis of an FFH/BFSK self-normalising receiver under multitone jamming p431
Performance of hybrid OCA-FD/CDMA for cellular mobile communications p363
Practical 8-PSK block-coded modulation with convolutional codes and soft decision block codes for packet networks p218
Practical RAKE receiver architecture for the downlink communications in a DS-CDMA mobile system p277
Smart codec: an adaptive packet data link p180
Teletraffic analysis of an integrated satellite/terrestrial mobile radio system based on nongeostationary satellites p378
Transmission modelling of ENCAP-OQPSK radio links p419

RADIOWAVE PROPAGATION

Delay spread profiles and receiver performance in a dense multipath environment p47
Extended UK models for high frequency spectral occupancy p168
Optimising indoor base-station locations in coverage- and interference-limited indoor environments p445

SIGNAL DETECTION

Analysis of DPSK nonlinear combiner over fading channels with impulse noise p406

SIGNAL PROCESSING

Adaptive Volterra channel equalisation with lattice orthogonalisation p109
Coding for coherent optical CDMA networks p117
Diversity combining with MLSE equalisation p105
FFT-based self-normalising receiver for FFH spread spectrum systems p99
Improving the capacity of CDMA systems using convolutional coding and interference cancellation p186
Shaping the boundary of a multi-dimensional signal constellation with a non-flat power spectrum p213

SWITCHING SYSTEMS

Look-ahead reservation-based scheduling for input-output buffered ATM switch p234

SWITCHING THEORY

Algorithm for sequential generation of states in failure-prone communication network p73
Analysis of dynamic priority cell discarding p249
Bandwidth allocation of virtual paths using neural-network-based genetic algorithms p33
Blocking analysis of time-division multiplexed multicast switch with intermediate channel grouping p19
Cell-access control for multiple cell-loss classes in shared ATM output buffer p8
Delay performance of an input queueing packet switch with two priority classes p141
Design of knockout concentrators p145
Evaluation of reservation-arbitrated access schemes for statistical multiplexing of variable-bit-rate video traffic over dual-bus metropolitan area networks p159
Fast and accurate estimation of ATM quality-of-service parameters with applications to call admission control p133
Fault diagnosis of a distributed knockout switch p241
Integration of optimal routing and flow control in ATM networks p1
Look-ahead reservation-based scheduling for input-output buffered ATM switch p234
Neurocontroller for buffer overload control in a packet switch p227
New system for the interconnection of ATM networks via wireless links p259
Performance of fast bandwidth reservation with multipath routing p80
Priority queue with two-state Markov-modulated arrivals p152
Throughput analysis of input-buffered ATM switch p15

TELECOMMUNICATION

Analysis of a leaky bucket control scheme in the signalling system no.7 network p25
Bandwidth allocation of virtual paths using neural-network-based genetic algorithms p33
Coding for coherent optical CDMA networks p117
Fast decoder for triple-error-correcting primitive binary BCH codes with odd m p60
Lower bound for multimedia multicast routing p87
Multimedia transport in multihop wireless networks p342
Multiparty videoconferencing on multi-drop VP-based SONET/ATM rings: performance analysis p389
Reservation arbitrated access for efficient service integration over dual-bus metropolitan area networks p347
Smart codec: an adaptive packet data link p180
Systolic decoder for burst error-correcting codes p126

TELEMETRY

New channel access protocol for a wide area DGPS deformation monitoring network p203